

ATENT COOPERATION TR TV

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43b/s.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No
PCT/US2004/006759

International filing date (day/month/year)
05.03.2004

Priority date (day/month/year)
06.03.2003

International Patent Classification (IPC) or both national classification and IPC
H04J11.00

Applicant
QUALCOMM INCORPORATED

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43b/s.1(a)(i) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 56.1b(s)(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/US2004/006759

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No
PCT/US2004/006759

Box No. II Priority

1. ☐ The following document has not been furnished:

- ☒ copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a))
- ☐ translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|--|
| Novelty (N) | Yes: Claims | 7,11,18,22,29,33,40,44 |
| | No: Claims | 1-6,8-10,12-17,19-21,23-28,30-32,34-39,41-43 |
| Inventive step (IS) | Yes: Claims | |
| | No: Claims | 1-44 |
| Industrial applicability (IA) | Yes: Claims | 1-44 |
| | No: Claims | |

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement under Rule 43bis.1(a)(I), with regard to novelty, inventive step or industrial activity; citations and explanations supporting such statement

1. Reference is made to the following document:

D1: OGUZ SUNAY M ET AL: "Provision of variable data rates in third generation wideband DS CDMA systems" WIRELESS COMMUNICATIONS AND NETWORKING CONFERENCE, 1999. WCNC. 1999 IEEE NEW ORLEANS, LA, USA 21-24 SEPT. 1999, PISCATAWAY, NJ, USA, IEEE, US, 21 September 1999 (1999-09-21), pages 505-509, XP010353838 ISBN: 0-7803-5668-3

2. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1, 12, 23 and 34 is not new in the sense of Article 33(2) PCT.

- 2.1 Document **D1** discloses the subject-matter of claim 1 (**fig. 2; page 506, right-hand col., parag. B; page 509, left-hand col.**):

A transmitter (**fig. 2**) operable to communicate with a receiver via a wireless communication channel, wherein the transmitter comprises:
a processing subsystem (**fig. 2, blocks before RF modulation**); and
a transmitter subsystem (**fig. 2, RF modulation**) coupled to the processing subsystem;

wherein the processing subsystem is configured to cover an initial data stream (**fig. 2, information signal**) to be transmitted on a first wireless communication channel with at least two different spreading codes (**fig. 2, parallel spreading blocks**); and
wherein the transmitter subsystem is configured to transmit a resulting final data stream on a first wireless communication channel (**fig. 2, wireless channel**).

- 2.2 A similar reasoning as in paragraph 2.1 applies to claim 23 which represents the same subject-matter as claim 1 under a different category.

- 2.3 Document **D1** discloses the subject-matter of claim 12 (**fig. 2; page 506, right-hand**

col., parag. B; page 509, left-hand col.):

A receiver (page 509, left-hand col.) operable to communicate with a transmitter via a wireless communication channel, wherein the transmitter comprises:
a processing subsystem (**implicit before RAKE receivers**); and
a receiver subsystem (**RAKE receivers**) coupled to the processing subsystem;
wherein the receiver subsystem is configured to receive an initial data stream (**RF modulated signal**) via a first wireless communication channel (**wireless channel**);
and
wherein the processing subsystem is configured to decode the initial data stream using at least two different spreading codes (**M parallel RAKE receivers**).

- 2.4 A similar reasoning as in paragraph 2.3 applies to claim 34 which represents the same subject-matter as claim 12 under a different category.
3. The following dependent claims do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, the reasons being as follows:
- 3.1 The additional features of claims 2-6, 8-10, 16, 17, 19-21, 24-28, 30-32, 38, 39, and 41-43 are present in **D1 (citations in paragraph 2.1)**.
- 3.2 The additional features of claims 13-15, and 35-37 are implicitly present in **D1 (citations in paragraph 2.1)**.
- 3.3 The additional features of claims 11, 22, 33, and 44 appear to represent a juxtaposition of known features not producing any non-obvious inter-relationship.
- 3.4 The additional features of claims 7, 18, 29, and 40 are merely one of several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, in order to solve the problem posed.